REMARKS

Applicant is in receipt of the Office Action mailed May 4, 2009. Claims 1, 22, and 23 have been amended. Claims 1-24 are pending in the case. Reconsideration of the present case is earnestly requested in light of the following remarks.

Telephone Interview Summary

On Monday, June 15, 2009, a telephone interview was conducted between Examiner Bullock and Mark S. Williams (Reg.# 50,658), in which the Examiner suggested filing an amendment after Final Rejection amending the independent claims to clarify the meaning of "performing the respective signal operation substantially continuously upon being selected", specifically, by adding the phrase "without stopping execution of the set of function blocks", to which Applicant agreed. The Examiner indicated that while this amendment would distinguish over the current art, further searching was being performed (by Examiner Pan) to determine patentability of the amended claims.

Section 112 Rejections

Claim 4 was rejected under 35 U.S.C. 112, second paragraph, for being indefinite, specifically, for reciting that the diagram comprises one or more control structures that control execution of the set of function blocks. The Examiner argues that the control structures cannot be "in the diagram" and be functional. Applicant respectfully submits that one of skill in the programming arts would readily understand that a function or structure in a program's source code is understood to specify and represent functionality actually performed by executable program code generated based on the source code. For example, note that a FOR Loop in a standard textual FORTRAN program displayed in a development environment (e.g., GUI) is understood to control iterative execution of program code contained within the loop, even though one *could* make the argument that the textual letters actually displayed on the computer monitor do not and cannot *perform* any functionality at all, which is clearly not the correct way to consider the technical meaning of program control structures.

Applicant notes that claim 4 simply expresses the notion that the diagram, which includes the set of function blocks, and which may be considered to be a type of graphical program or executable diagram, also includes control structures for controlling execution of the function blocks.

Applicant thus submits that the meaning of control structures in a graphical program or graphical diagram as claimed and defined in the present application is clear to those of skill in the art, and respectfully requests removal of the section 112 rejection of claim 4.

Section 101 Rejections

Claims 23 and 24 were rejected under 35 U.S.C. 101 for being directed to nonstatutory subject matter for failing to recite a specific apparatus performing the method (or failing to recite transforming underlying subject matter). Applicant respectfully notes that these claims were amended in the previous Response to recite a specific apparatus *after* the preamble and transitional phrase "the method comprising", which by definition is in the body of the claim. Applicant thus submits that these claims explicitly recite a specific apparatus performing the method elements.

Applicant thus respectfully requests removal of the section 101 rejection of the claims.

Section 102 Rejections

Claims 1-14, 16, and 19-24 were rejected under 35 U.S.C. 102(e) as being anticipated by Zink et al (US Patent 6,738,964, "Zink"). Applicant respectfully traverses the rejection of these claims.

Applicant respectfully reminds the Examiner that the standard for "anticipation" is one of strict identity. Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim. M.P.E.P 2131; *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical invention** must be shown in as

complete detail as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Amended claim 1 recites:

1. A memory medium that stores program instructions implementing plurality of function blocks for use in specifying and performing a signal analysis function utilizing a plurality of instruments, wherein the plurality of instruments comprises two or more virtual instruments (VIs), wherein each function block comprises:

a function block icon operable to be displayed in a graphical user interface (GUI) of a signal analysis function development environment, wherein the function block icon visually indicates a respective signal operation; and

a set of program instructions associated with the function icon, wherein the set of program instructions are executable to perform the respective signal operation;

wherein each function block is selectable from the plurality of function blocks by a user for inclusion in a set of function blocks, and wherein each function block operates to perform the respective signal operation continuously upon being selected without stopping execution of the set of function blocks;

wherein each function block is operable to provide a respective output based on the respective signal operation, wherein the respective output is operable to be displayed in the GUI, provided as input to one or more other ones of the set of function blocks, or exported to an external device; and

wherein the set of function blocks is executable to perform the signal analysis function under the signal analysis function development environment using one or more of the plurality of instruments.

Nowhere does the cited art teach **wherein each function block operates to perform the respective signal operation continuously upon being selected without stopping execution of the set of function blocks**, as recited in claim 1.

Cited Figure 18 and related text disclose components for Zink's block diagrams, where blocks representing the components are connected with wires to graphically

implement programs for digital signal processors and system designs. However, Zink's block diagrams are included in projects that are "compiled, assembled, linked, built" (see, col.6:42-45). The resulting executable may then be deployed to target platforms for execution. For example, col.11:61-63 states "Platform components are components that contain information about the target hardware where the project's executable code will be 'run'". Nowhere does Zink mention or even hint at the components performing their respective functions continuously upon being selected, i.e., executing continuously as soon as they are added to the block diagram without stopping execution of the set of function blocks.

Thus, the cited art fails to disclose this feature of claim 1.

Thus, for at least this reason, Applicant submits that the cited art fails to teach or suggest all of the features and limitations of claim 1. Thus claim 1, and those claims respectively dependent therefrom, are patently distinct and nonobvious over the cited art, and thus allowable.

Independent claims 22 and 23 include similar limitations as claim 1, and so the above arguments apply with equal force to these claims. Thus, for at least the above reasons, claims 22 and 23, and those claims respectively dependent therefrom, are similarly patently distinct and nonobvious over the cited art, and thus allowable.

Applicant asserts that numerous ones of the dependent claims recite further distinctions over the cited art.

For example, nowhere does the cited art teach **wherein the diagram comprises one or more control structures, wherein the one or more control structures control execution of the set of function blocks; and wherein the one or more control structures comprises one or more of: conditional branching; or looping**, as recited in claim 4.

As explained previously, cited Figure 16C illustrates multiple code modules in a development component, where, as the related text explains, the particular code module included in the project depends on property settings. Applicant respectfully notes that the citation does *not* disclose *control structures, i.e., conditional branching or looping, in the*

diagram. More specifically, note that the cited "conditional" (which is decidedly *not* a conditional program element in the program) simply refers to the fact that the user configures a property, e.g., "triangle waveform", which results in inclusion of the appropriate code module, e.g., "the 'triangle files' (triangle.h, triangle.c, and triangle.obj) into the project". Clearly, this is not a conditional *in the diagram, is not represented in the diagram*, and *is not exercised during execution of the diagram (the executable generated from the diagram)*. As explained above at length in the section 112 rejection arguments, Applicant respectfully submits that one of skill in the programming arts readily understands that a function or structure in a program's source code specifies and represents functionality actually performed by executable program code generated based on the source code, e.g., a FOR Loop in a textual FORTRAN program displayed in a development environment (e.g., GUI) is understood to control iterative execution of program code contained within the loop, even though one could make the argument that the textual letters actually displayed on the computer monitor do not and cannot perform any functionality at all, which is clearly not the correct way to consider the technical meaning of program control structures.

Applicant notes that claim 4 simply expresses the notion that the diagram, which includes the set of function blocks, and which may be considered to be a type of graphical program or executable diagram, also includes control structures for controlling execution of the function blocks

Thus, the cited art fails to disclose this feature of claim 4.

Nor does the cited art teach **wherein the diagram comprises information specifying the respective signal operations of the set of function blocks, and wherein the information is executable to perform the signal analysis function under the signal analysis function development environment**, as recited in claim 5.

As explained previously, cited Figure 16C illustrates multiple code modules in a development component, where, as the related text explains, the particular code module included in the project depends on property settings, and where the included code is "compiled, assembled, linked, built" (see, col.6:42-45), where the resulting executable is deployed to target platforms for execution. Nowhere does Zink indicate that Zink's

executable files perform their functionality under the development environment in which they were developed. Applicant respectfully notes that this feature of claim 5 facilitates the "continuous" execution functionality discussed above with respect to claim 1, in that the function blocks can continue to execute during development of the signal analysis function. Moreover, regarding cited Figure 22A, nowhere does Zink mention or even hint that the cited list of information (files) contained in the tree diagram that specifies the respective signal operations, nor the signal analysis function itself, are executable under the signal analysis function development environment.

Thus, the cited art fails to disclose these features of claim 5.

Applicant also asserts that numerous other ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Removal of the section 102 rejection of claims 1-14, 16, and 19-24 is earnestly requested.

Section 103 Rejections

Claims 15, 17, and 18 were rejected under 35 U.S.C. 103(a) as being unpatentable over Zink et al (US Patent 6,738,964, "Zink") in view of Austin (US Patent Pub. 2002/0070966).

As the Examiner is certainly aware, if an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)

Applicant asserts that numerous ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.

Removal of the section 103 rejection of claims 15, 17, and 18 is earnestly requested.

CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits the application is now in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above-referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel P.C., Deposit Account No. 50-1505/5150-82300/JCH.

Also filed herewith are the following items:

☐ Request for Continued Examination

☐ Terminal Disclaimer

☐ Power of Attorney By Assignee and Revocation of Previous Powers

☐ Notice of Change of Address

☐ Other:

Respectfully submitted,

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